



RELEASE AND POLLUTION PREVENTION REPORT

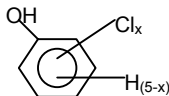
APPENDIX C HAZARDOUS SUBSTANCE LIST CHEMICAL CATEGORIES ONLY

In addition to the specific substances listed in APPENDIX B, the following chemical categories are required to be reported when the manufacture, process or otherwise use thresholds are exceeded. However, threshold determinations must be made separately for each of the three activities. Reporting is required pursuant to the New Jersey Worker and Community Right to Know Act (N.J.S.A. 34:5A-1.1 et seq.).

When reporting for any of the chemical categories, all individual members of the category that are manufactured, processed, or otherwise used must be counted. The metal compounds listed below, unless otherwise specified, are defined as including any unique chemical substance that contains the named metal (e.g. antimony, arsenic, etc.) as part of that chemical's structure. Threshold determinations for metal-containing compounds are based on the total weight of all compounds manufactured, processed or otherwise used. However, once an activity threshold is exceeded, report only the quantities of the parent metal.

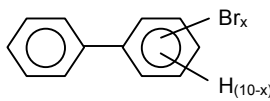
For the category "nitrate compounds (water dissociable; reportable only when in aqueous solution)," the entire weight of the nitrate compounds is counted toward the threshold. This listing covers a nitrate compound only when in water and only if dissociated. If no information is available on the identity of the type of nitrate that is manufactured, processed or otherwise used, assume that the nitrate compound exists as sodium nitrate.

Chemical categories are subject to the 1.0 percent de minimis concentration unless the substance involved meets the definition of an OSHA carcinogen. OSHA carcinogens are subject to the 0.1 percent de minimis concentration. The de minimis exemption does not apply to the persistent, bioaccumulative (PBT) toxic chemicals. The de minimis concentration for each category is provided in parentheses following the category name.

<u>Category¹ Code</u>	<u>RTK Number</u>	<u>Chemical Category Name (de minimis concentration)</u>
N010	2223	Antimony Compounds (1.0)
N020	2138	Arsenic Compounds (inorganic compounds: 0.1; organic compounds: 1.0)
N040	2146	Barium Compounds (1.0) (excludes Barium sulfate CAS# 7727-43-7)
N050	2163	Beryllium Compounds (0.1)
N078	2199	Cadmium Compounds (0.1)
N084	2976	Chlorophenols (0.1)
		 Where $x = 1$ to 5
N090	2245	Chromium Compounds (chromium VI compounds: 0.1; chromium III compounds: 1.0)
N096	2222	Cobalt Compounds (0.1)
N100	2215	Copper Compounds (1.0) (excludes C.I. Pigment Blue 15, C.I. Pigment Green 7, C.I. Pigment Green 36, and all copper phthalocyanine compounds substituted with only hydrogen and/or bromine and/or chlorine)
N106	2308	Cyanide Compounds (1.0) X^+CN^- where $X = H^+$ or any other group where a formal dissociation may occur.

(continued)

Category ¹ Code	RTK Number	Chemical Category Name (de minimis concentration)																																								
N120	3757	<p>Diisocyanates (1.0)</p> <p>This category includes only those chemicals listed below:</p> <table><tr><td>1,3-Bis(methylisocyanate)cyclohexane</td><td>38661-72-2</td></tr><tr><td>1,4-Bis(methylisocyanate)cyclohexane</td><td>10347-54-3</td></tr><tr><td>1,4-Cyclohexane diisocyanate</td><td>2556-36-7</td></tr><tr><td>Diethyldiisocyanatobenzene</td><td>134190-37-7</td></tr><tr><td>4,4'-Diisocyanatodiphenyl ether</td><td>4128-73-8</td></tr><tr><td>2,4'-Diisocyanatodiphenyl sulfide</td><td>75790-87-3</td></tr><tr><td>3,3'-Dimethoxybenzidine-4,4'-diisocyanate</td><td>91-93-0</td></tr><tr><td>3,3'-Dimethyl-4,4'-diphenylene diisocyanate</td><td>91-97-4</td></tr><tr><td>3,3'-Dimethyldiphenylmethane-4,4'-diisocyanate</td><td>139-25-3</td></tr><tr><td>Hexamethylene-1,6-diisocyanate</td><td>822-06-0</td></tr><tr><td>Isophorone diisocyanate</td><td>4098-71-9</td></tr><tr><td>4-Methyldiphenylmethane-3,4-diisocyanate</td><td>75790-84-0</td></tr><tr><td>1,1-Methylene bis(4-isocyanatocyclohexane)</td><td>5124-30-1</td></tr><tr><td>Methylenebis(phenylisocyanate)²</td><td>101-68-8</td></tr><tr><td>1,5-Naphthalene diisocyanate</td><td>3173-72-6</td></tr><tr><td>1,3-Phenylene diisocyanate</td><td>123-61-5</td></tr><tr><td>1,4-Phenylene diisocyanate</td><td>104-49-4</td></tr><tr><td>Polymeric diphenylmethane diisocyanate</td><td>9016-87-9</td></tr><tr><td>2,2,4-Trimethylhexamethylene diisocyanate</td><td>16938-22-0</td></tr><tr><td>2,4,4-Trimethylhexamethylene diisocyanate</td><td>15646-96-5</td></tr></table>	1,3-Bis(methylisocyanate)cyclohexane	38661-72-2	1,4-Bis(methylisocyanate)cyclohexane	10347-54-3	1,4-Cyclohexane diisocyanate	2556-36-7	Diethyldiisocyanatobenzene	134190-37-7	4,4'-Diisocyanatodiphenyl ether	4128-73-8	2,4'-Diisocyanatodiphenyl sulfide	75790-87-3	3,3'-Dimethoxybenzidine-4,4'-diisocyanate	91-93-0	3,3'-Dimethyl-4,4'-diphenylene diisocyanate	91-97-4	3,3'-Dimethyldiphenylmethane-4,4'-diisocyanate	139-25-3	Hexamethylene-1,6-diisocyanate	822-06-0	Isophorone diisocyanate	4098-71-9	4-Methyldiphenylmethane-3,4-diisocyanate	75790-84-0	1,1-Methylene bis(4-isocyanatocyclohexane)	5124-30-1	Methylenebis(phenylisocyanate) ²	101-68-8	1,5-Naphthalene diisocyanate	3173-72-6	1,3-Phenylene diisocyanate	123-61-5	1,4-Phenylene diisocyanate	104-49-4	Polymeric diphenylmethane diisocyanate	9016-87-9	2,2,4-Trimethylhexamethylene diisocyanate	16938-22-0	2,4,4-Trimethylhexamethylene diisocyanate	15646-96-5
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N150	3760	<p>Dioxin and Dioxin-like Compounds (manufacturing; and the processing or otherwise use of dioxin and dioxin-like compounds if the dioxin and dioxin-like compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical) (PBT)</p> <p>This category includes only the 17 listed chemicals below:</p> <table><tr><td>1,2,3,4,6,7,8-Heptachlorodibenzofuran</td><td>67562-39-4</td></tr><tr><td>1,2,3,4,7,8,9-Heptachlorodibenzofuran</td><td>55673-89-7</td></tr><tr><td>1,2,3,4,7,8-Hexachlorodibenzofuran</td><td>70648-26-9</td></tr><tr><td>1,2,3,6,7,8-Hexachlorodibenzofuran</td><td>57117-44-9</td></tr><tr><td>1,2,3,7,8,9-Hexachlorodibenzofuran</td><td>72918-21-9</td></tr><tr><td>2,3,4,6,7,8-Hexachlorodibenzofuran</td><td>60851-34-5</td></tr><tr><td>1,2,3,4,7,8-Hexachlorodibenzo-<i>p</i>-dioxin</td><td>39227-28-6</td></tr><tr><td>1,2,3,6,7,8-Hexachlorodibenzo-<i>p</i>-dioxin</td><td>57653-85-7</td></tr><tr><td>1,2,3,7,8,9-Hexachlorodibenzo-<i>p</i>-dioxin</td><td>19408-74-3</td></tr><tr><td>1,2,3,4,6,7,8-Heptachlorodibenzo-<i>p</i>-dioxin</td><td>35822-46-9</td></tr><tr><td>1,2,3,4,6,7,8,9-Octachlorodibenzofuran</td><td>39001-02-0</td></tr><tr><td>1,2,3,4,6,7,8,9-Octachlorodibenzo-<i>p</i>-dioxin</td><td>3268-87-9</td></tr><tr><td>1,2,3,7,8-Pentachlorodibenzofuran</td><td>57117-41-6</td></tr><tr><td>2,3,4,7,8-Pentachlorodibenzofuran</td><td>57117-31-4</td></tr><tr><td>1,2,3,7,8-Pentachlorodibenzo-<i>p</i>-dioxin</td><td>40321-76-4</td></tr><tr><td>2,3,7,8-Tetrachlorodibenzofuran</td><td>51207-31-9</td></tr><tr><td>2,3,7,8-Tetrachlorodibenzo-<i>p</i>-dioxin</td><td>1746-01-6</td></tr></table>	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	1,2,3,4,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	39227-28-6	1,2,3,6,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	57653-85-7	1,2,3,7,8,9-Hexachlorodibenzo- <i>p</i> -dioxin	19408-74-3	1,2,3,4,6,7,8-Heptachlorodibenzo- <i>p</i> -dioxin	35822-46-9	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzo- <i>p</i> -dioxin	3268-87-9	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	1,2,3,7,8-Pentachlorodibenzo- <i>p</i> -dioxin	40321-76-4	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin	1746-01-6						
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N171	3614	Ethylenebisdithiocarbamic acid, salts and esters (EBDCs) (1.0)																																								
N230	3138	<p>Glycol Ethers (1.0) (excludes surfactant glycol ethers)</p> <p>consists of those glycol ethers that meet the following definition:</p> <p style="padding-left: 40px;">R-(OCH₂CH₂)_n-OR'</p> <p>where</p> <p style="padding-left: 40px;">n = 1,2, or 3;</p> <p style="padding-left: 40px;">R = alkyl C7 or less; or</p> <p style="padding-left: 40px;">R = phenyl or alkyl substituted phenyl;</p> <p style="padding-left: 40px;">R' = H or alkyl C7 or less; or</p> <p style="padding-left: 40px;">OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.</p>																																								

Category ¹ Code	RTK Number	Chemical Category Name (de minimis concentration)																																										
N420	2266	Lead Compounds (PBT)																																										
N450	2324	Manganese Compounds (1.0)																																										
N458	2414	Mercury Compounds (PBT)																																										
N495	2366	Nickel Compounds (0.1)																																										
N503	2583	Nicotine and salts (1.0)																																										
N511	3722	Nitrate compounds (water dissociable; reportable only when in aqueous solution) (1.0)																																										
N575	1552	Polybrominated Biphenyls (PBBs) (0.1)																																										
		<div><p>Where $x = 1$ to 10</p></div>																																										
N583	3733	<p>Polychlorinated alkanes (C₁₀ to C₁₃) (1.0, except for those members of the category that have an average chain length of 12 carbons and contain an average chlorine content of 60 percent by weight which are subject to the 0.1 percent de minimis)</p> <p>This category includes those chemicals defined by the following formula:</p> $C_xH_{2x-y+2}Cl_y$ <p>where</p> <p>$x = 10$ to 13; $y = 3$ to 12; and where the average chlorine content ranges from 40-70% with the limiting molecular formulas C₁₀H₁₉Cl₃ and C₁₃H₁₆Cl₁₂.</p>																																										
N590	3758	<p>Polycyclic aromatic compounds (PACs) (PBT):</p> <p>This category includes only the 21 chemicals listed below:</p> <table><tr><td>Benz[a]anthracene</td><td>56-55-3</td></tr><tr><td>Benzo[b]fluoranthene</td><td>205-99-2</td></tr><tr><td>Benzo[j]fluoranthene</td><td>205-82-3</td></tr><tr><td>Benzo[j,k]fluorene³</td><td>206-44-0</td></tr><tr><td>Benzo[k]fluoranthene</td><td>207-08-9</td></tr><tr><td>Benzo[r,s,t]pentaphene</td><td>189-55-9</td></tr><tr><td>Benzo[a]phenanthrene</td><td>218-01-9</td></tr><tr><td>Benzo[a]pyrene</td><td>50-32-8</td></tr><tr><td>Dibenz[a,h]acridine</td><td>226-36-8</td></tr><tr><td>Dibenz[a,j]acridine</td><td>224-42-0</td></tr><tr><td>Dibenzo[a,h]anthracene</td><td>53-70-3</td></tr><tr><td>7H-Dibenzo[c,g]carbazole</td><td>194-59-2</td></tr><tr><td>Dibenzo[a,e]fluoranthene</td><td>5385-75-1</td></tr><tr><td>Dibenzo[a,e]pyrene</td><td>192-65-4</td></tr><tr><td>Dibenzo[a,h]pyrene</td><td>189-64-0</td></tr><tr><td>Dibenzo[a,l]pyrene</td><td>191-30-0</td></tr><tr><td>7,12-Dimethylbenz[a]anthracene</td><td>57-97-6</td></tr><tr><td>Indeno[1,2,3-cd]pyrene</td><td>193-39-5</td></tr><tr><td>3-Methylcholanthrene³</td><td>56-49-5</td></tr><tr><td>5-Methylchrysene</td><td>3697-24-3</td></tr><tr><td>1-Nitropyrene</td><td>5522-43-0</td></tr></table>	Benz[a]anthracene	56-55-3	Benzo[b]fluoranthene	205-99-2	Benzo[j]fluoranthene	205-82-3	Benzo[j,k]fluorene ³	206-44-0	Benzo[k]fluoranthene	207-08-9	Benzo[r,s,t]pentaphene	189-55-9	Benzo[a]phenanthrene	218-01-9	Benzo[a]pyrene	50-32-8	Dibenz[a,h]acridine	226-36-8	Dibenz[a,j]acridine	224-42-0	Dibenzo[a,h]anthracene	53-70-3	7H-Dibenzo[c,g]carbazole	194-59-2	Dibenzo[a,e]fluoranthene	5385-75-1	Dibenzo[a,e]pyrene	192-65-4	Dibenzo[a,h]pyrene	189-64-0	Dibenzo[a,l]pyrene	191-30-0	7,12-Dimethylbenz[a]anthracene	57-97-6	Indeno[1,2,3-cd]pyrene	193-39-5	3-Methylcholanthrene ³	56-49-5	5-Methylchrysene	3697-24-3	1-Nitropyrene	5522-43-0
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<u>Category¹ Code</u>	<u>RTK Number</u>	<u>Chemical Category Name (de minimis concentration)</u>
N725	2347	Selenium Compounds (1.0)
N740	3008	Silver Compounds (1.0)
N746	3741	Strychnine and salts (1.0)
N760	2809	Thallium Compounds (1.0)
N770	3492	Vanadium Compounds (1.0)
N874	3627	Warfarin and salts (1.0)
N982	3012	Zinc Compounds (1.0)

1. When reporting a chemical category on the RPPR, the category code number is to be entered on Section B, #1.1, *CAS No. (Category No.)*, on Section C, #1.1, *CAS No. (Category No.)*, on Section D, #2.2, *CAS Number (Category No.)*, and on the P2-115.
2. Methylenebis(phenylisocyanate) (CAS# 101-68-8), a previously listed substance, has been moved into the "Diisocyanates" category.
3. Two substances, benzo(j,k)fluorene (206-44-0) and 3-methylcholanthrene (56-49-5), were added to the "Diisocyanates" category effective RY 2000.

Should you have any questions regarding completion of the RPPR, contact the DEP's Office of Pollution Prevention and Right To Know at (609) 777-0518.